

Ushakova, G. S. and Eremin, E. N.
FORMATION D'OZONE A PARTIR DES PRODUITS
DE LA DISSOCIATION DU CO₂ DANS LA DÉCHARGE
OBSCURE [Obrazovanie Ozona iz Produktov Dissoc-
iatsii CO₂ v Teyushchem Razryade] (Formation of
Ozone Starting with Dissociation Products of CO₂ in
the Dark Discharge) tr. by Kefell. 23 Feb 60 (6 p.
1 ref. CEA Trans. no. R 832 (text in French).
Order from OTS or SLA \$1.10 61-23794

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1959, v. 33, no. 1, p. 233.

DESCRIPTORS: *Ozone, *Glow discharges, *Carbon
dioxide, *Dissociation.

A discharge tube of the type Vod, with aluminum elec-
trodes, was used and the reaction products were
frozen. A 250-ma current and a 2.4- to 2.5-kv po-
tential were used. In order to reduce the dissociation
(Chemistry--Physical, TT, v. 6, no. 6) (over)

61-23794

- I. Ushakova, G. S.
- II. Eremin, E. N.
- III. CEA-tr-R832
- IV. Commissariat à l'Énergie
Atomique (France)

176691

Office of Technical Services

The Crystalline State of Polymers. Part II.
Crystallization of Polymers in the Process of
Film Formation, by D. D. Chagovayev, N. A.
Dugorkova.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 2,
1959, pp 262-270.

10 12 111 175 1512
ATS RJ-1659

XX-823

105060

Sci - Chem

Jan 60

The Porous Structure and Specific Surface Area
of $\text{NiO-Al}_2\text{O}_3$ Catalysts and the Variation of These
Properties With Changes in Composition and Thermal
Treatment, by A. M. Rubinshteyn, et al.

RUSSIAN, per, ~~Zhur Fiz-Khim~~, Vol XXIII, No 2,
1959, pp 310-317.

DSIR LLU M.1405
(loan)

SLA 60-73088

128,765

Sci - Chem

Oct 60

Report of the Liquid Methane, by Y. L.
In the laboratory.

RUSSIAN, Eng. Trans. Lit. Xmas, Vol. XXXIII, No. 2,
1977, pp. 2-3, 271.

ATS RJ-2039

Col. - 0001
100 19

103,973

An Investigation Into the Thermodynamics of
Solid Solution of Gold, Silver and Copper,
by A. N. Nesmeyanov,
RUSSIAN, per, Zhurnal Fizicheskoi Khimii,
Vol XXXIII, No 2, 1959, pp 342-348.
*CFSTI TT 67-51425

Sci-Phys
Jun 67

The Role of Catalyzing Additions in the Processes
for the Production of Fatty Acids and Alcohols
by Direct Oxidation of Paraffinic Hydrocarbons,
by Ya. B. Chertkov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 2,
1959, pp 353-359.

ATS RJ-1916

Sci - Chem
Dec 59

104,092

Kinetics of Anode Processes. Part 2. Anodic
Polarization of a Smooth Platinum Electrode in
Solutions of Perchloric Acid, by I. I. Appenin.

RUSSIAN, per, Zhur Fiz Khim, No 2, 1959,
pp 367-373.

NLL RTS 1796

Sci - Chem

177,582

Dec 61

Mechanism of Metal Corrosion in Narrow Slits and
Grevices, by I. L. Rozenfeld, *field* I. K. Marshakov,
8 pp. UNCL

RUSSIAN, per, Zhur Fiz Khim, No 2, 1959, pp 411-415.
9660725

ATTC MCL-248/III

Sci - Chem

Apr 61

Telecom IC 41547

149698

Popov, D. K.
THE SZILLARD-CHAMBERS EFFECT IN THE
--QUANTUM IRRADIATION OF CHROMATES AND
BICHROMATES. [1960] [7]p. 6 refs.
Order from LC or SLA m\$1.80, ph\$1.80 60-16906

Trans. of Zhurn[al] Fiz[icheskoy] Khimii (USSR) 1959,
v. 33 [no. 2] p. 405-410.

The Szillard-Chambers effect of Cr^{49} formed from the
alkaline metal and ammonium chromates and bichro-
mates in line with the reaction $Cr^{50}(\gamma n)Cr^{49}$ was
demonstrated. The enrichment factor is greater than
10⁴. The retention factor in the irradiated solid prepa-
rations depends upon the time passing from the dis-
solution of the salt and the isolation of the Cr^{49} on iron
hydroxide, whereas on irradiating aqueous solutions
the retention is always of zero value. On dissolution
of the irradiated crystals the unstable valence forms of
chromium are distributed between Cr^{3+} and Cr^{6+} .
(Author)
(Nuclear Physics--Isotope Separation, TT, v. 5, no. 3)

60-16906

1. Chromium isotopes--
Separation
2. Chromates--Effects of
radiation
1. Popov, D. K.

142,946

Office of Technical Services

Adsorption Phenomena in the System Hydrogen-
Carbon Dioxide- Carbon Monoxide- Steam. I,
by L. G. Antonova, et al. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 2,
1959, pp 416-421.

DSIR ^I LLJ M.1245

(loan)

Sci -Chem
Mar 60

111,138

On the Theory of Liquid Diffusion Electrodes II,
Electrodes of Second Type, by I. A. Zaydenman, *125 pp*

RUSSIAN, per, Zhur Fiz Khim, No 2, 1959, pp 437-
440.

ACSI H-6378

Sci - Phys

May 60

114,509

Investigation of the Capacitance of a Germanium
Electrode by E. A. Yefimov, I. G. Yerusalimchik,
10 pp.

RUSSIAN, per, Zhur Fiz Khim, 1959, Vol XXXIII, No 2,
pp 441-446.

SLA 59-16138

Sci
Oct 59
Vol 2, No 3

99, 927

The Catalytic Activity of Rare Elements in the
Decomposition of Hydrogen Peroxide. II, by
P. M. Perelman, et al. UNCL^a

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 2,
1959, pp 452-455.

DSIR LUU M.1255

(loan)

Sci - Chem

Mar 60

111,130

The Radiation Oxidation of Nitrogen IV. Temperature Dependence and the Part Played by Ions in the Reaction Under the Action of Fast Electrons, by M. T. Dmitriev, S. Ya. Pabzhetskii, 20 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 2, 1959, pp 463-470. 9213064

(LOAN) NLL REF 5828.4 1963 (10,407)
AEC-HP-Tr-1037

Sci - Phys

Oct 63

345,204

19

(DC-3696)
(DC-3692).Aleksy Aleksandrovich Balandin on his 60th Birthday,
by A. A. Tolstopyatova, 4 pp.RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 2, 1959,
pp 504-506.

JPRS 3368

JPRS 3816

USSR
Biog
Jun 60

117,572

(DC-3696)

Mikhail Isaakovich Temkin, by L. O. Apel'baum, A. I.
Gel'bshteyn, N. V. Kul'kova, N. N. Morozov, 3 pp

RUSSIAN, per, Zhur Fiz Khim, No 2, 1959, pp 507-508

JPRS 3846

USSR

Biog

Sep 60

On the Critical State in Liquid-Gas Transitions,
by V. Yu. Urbakh, 15 pp.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii,
Vol 33, 1959, pp 515-522. F911143167

AEC LA Tr-66-82

326,371

Sci - Nuclear Science
May 67

The Relation of λ_0 to η and D of the Medium
[O Zavisimosti λ_0 to η i D Sredy], by Ya. F.
Mezhennyy, 7 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII,
[No 3], 1959, pp 550-553.

SLA 60-17726

Sci

OTS, Vol IV, No 3

133,060

Oct 60

Co-polymerization of Unsaturated Polyesters
With Vinyl Monomers. II. Determination of
Reactivity Ratios, by A. B. Tokarev.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII,
No 3, 1959, pp 554-558.

CSIRO

Sci - Chem
Dec 61

175,777

Perturbation of the Thermal Equilibrium
Distribution in Thermal Dissociation
of Diatomic Molecules, by E. E. Nikitin,
14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII,
No 3, 1959, pp 572-580. 9696629
FTD-TT-64-468

Sci - Nucl Sci
Apr 65

278,336

5-10-60

(NY-5022)

Equation of State and Thermodynamic Properties
of Propylene, by Ya. Z. Kazavchinskiy, V. A.
Zagoruchenko, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol. XXXIII, No 3,
1959, pp 662-664.

JPRS 5868

Sci - Phys

Oct 60

129,561

S-138/60

(NY-3706)

The Formation of Nitrogen Oxides in the Shock Wave
of a Strong Explosion in Air, by Yu. P. Rayzer,
16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 3,
1959, pp 700-709.

JPRS 2956

Sci - Phys

Jul 60

119,991

Discussion: The Relations Between the Energy of
Electron Excitation and the Energy of Electroreduction
of Aromatic Molecules, by Z. R. Grabovskiy, 6 pp.

RUSSIAN, Per, Zhur Fiz Khim, 1959, Vol XXXIII, No 3,
pp 728-731.

ATS-00432R

Sci
Oct 59
Vol 2, No 3

99,906

S-77/CO

(NY 3545).

A New Method For Separating Isotopes, by G. M.
Panchenkov, A. M. Tolmachev, V. B. Kondratova,
3 pp.

RUSSIAN, per. ^VZhizn Fiz Khim, Vol XXXIII, No 3, 1959,
pp 734, 735.

JPNS 2626

Sci - Chem
May 60

116,675

On Sintering (in the Solid Phase), by B. Ya.
Pines, 11 pp.
RUSSIAN, per, Zhurnal Tekhnicheskoy Fiziki,
Vol 16, No 6, 1946, pp 737-743. P911143667
AEC Sc-T-67-0907

326,358

Sci - Mech
May 67

Apr 29, 59

K. A. Gol'bert, K. S. Ponomareva, "A. A.
Zhukhovitskiy," Zhurnal Fizicheskoy Khimii,
Vol 33, No 3, Mar 59, pp 738-739.

SIR T-23.

L. M. Bl.

The Application of a Flow Counter for Measuring the
Moisture Permeability of Films from Synthetic
Materials with the Aid of Tritium Labelled Water, by
E. E. Finkel, K. V. Chmutov, 11, pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 4,
1959.

ACSI H-6287

Sci - Chem

May 60

115,546

Determination of the Parameters of Space
and Boundary Diffusion of Silver in
Aluminum, by S. D. Gertsriken, et al.
RUSSIAN, per, Ukrain. Fiz. Zhur., 4,
1959, pp. 127-129.
*CFSTI TT 70-57045

Sci/phys
Feb 70

Study of the Compatibility of Three-
Component Polymer Mixtures, by I. U.
Mishustin, V. I. Alekseenko.

RUSSIAN, per, Zhur Fiz Khim,
Vol XXXIII, 1959, pp 757-762.

CSIRO

Sci - Phys
Jul 62

204,894

Determination of Surface Tension at High Temperatures by the Hanging and Creeping Drop Methods, by V. I. Smirnova, B. F. Ormont.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 4, 1959, pp 771-779.

DSIR LLU RTS 1590

Sci - Phys

128,837

Oct 60

CEA-tr-R-1290 Uncl.

LA THERMOCHIMIE DES ISOTOPES. II. ETUDE DES
CHALEURS DE FORMATION DU SELENIURE D'HYDROGENE
ET DU SELENIURE DE DEUTERIUM. (The Thermo-
chemistry of Isotopes. II. Study of the Heats
of Formation of Hydrogen Selenides and of
Deuterium Selenides). A. F. Kapustinskii
(Kapustinsky) and R. T. Kankovskii (Kankovsky).
Translated into French from Zhur. Fiz. Khim.,
33: 722-6(1959). 17p.

Chemistry; Translations MC-4

C-4 NP NSA Dep.(mc); \$1.60(fs), \$0.80(mf)
 JCL or OTS

N-6

Kinetics of Reduction of ZrI_4 by Metallic
Zirconium, by F. Busol.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 4,
1959, pp 799-807.

CSIRO/No 5966

Sci-Chem
Mar 63

225,249

Physicochemical Analysis of Systems Composed of
Alcohols and Organic Acids. Part II, by Z. S.
Brutman.

RUBIN, per, Zhur Fiz Khim, Vol XXXIII, No 4,
1959, pp 822-827.

ATS RJ-2020

Sci - Chem

Jan 60

105,791

Megarik, S. Ya. and Tavetkov, V. [N].
OPTICAL ANISOTROPY OF POLYMETHYL METHA-
CRYLATE, POLY-p-t-BUTYLPHENYL METHACRY-
LATE, AND THEIR COPOLYMERS [Opticheskaya
Anizotropiya Polimetilmetakrilata, Poli-p-tret-
butilfenil-metakrilata i ikh Sopolimerov]. [1961] 5p.
Order from ATS \$8.90 ATS-12N49R

Trans. of Zhurnal Fizicheskoy Khimii [U] (USSR)
1959, v. 33, no. 4, p. 835-839.

(Materials--Plastics, TT, v. 5, no. 10)

61-12998

1. Acrylic resins--
Optical properties
2. Copolymerization
- I. Megarik, S. Ya.
- II. Tavetkov, V. N.
- III. ATS-12N49R
- IV. Associated Technical
Services, Inc., East
Orange, N. J.

ATS/KJ-3012

158889

Office of Technical Services

A Study of Anion Adsorption on Plating by the
Alternating Current Method, by T. P. Brintseva,
B. N. Kabanov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 4,
1959, pp 844-851.

ATS-91M42R
ATE/RJ-2534

Sci

195, 977

Vol 4, No 10
May 62

Model Studies on the Regeneration of Silica-Alumina Cracking Catalysts. I. Method of Study and the Coke Distribution in a Particle of Silica-Alumina Bead Catalyst, by D. P. Dobychin, Th. M. Klibanova.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 4, 1959, pp 869-876,

ATS RJ-1893

Sci - Chem
Dec 59

104,072

The Effect of the Conditions of Preparing Silica
and Alumina Hydrogels on the Structure and
Activity of Mixed Silica-Alumina Catalysts, by
M. A. Kaliko, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 4,
1959, pp 922-929,

ATS RJ-1894

Sci - Chem
Dec 59

104,073

The Study of the Mechanism of Electrochemical
Corrosion of Titanium, by N. D. Tomashov, R. M.
At'kovskiy.

RUSSIAN, per, ~~Zhur Fiz Khim~~, Vol XXXIII, No 5,
1956, pp 781-783.

DSIR LLU RTS 1510

Sci .. Chem

Aug 60

122,509

Study on the Kinetics of Ion Exchange
Sorption II. The Kinetics of Exchange
With the Participation of Hydrogen Ions,
by O. P. Fedoseyeva, et al.

RUSSIAN, ~~part~~, Zhur Fiz Khim, Vol XXXIII,
No 4, 1959, pp 936-942.

CSIRO

Sci - Phys
Jun 62

203,353

62-10229

Fedosseeva, O. P., Chernyaeva, E. P., and
Tunitskil, N. N.
STUD[Y OF] THE KINETICS OF ION EXCHANGE
SORPTION. II. KINETICS OF EXCHANGE WITH
PARTICIPATION OF HYDROGEN IONS [Issledovanie
Kinetiki Ionooobmennoi Sorbtail. II. Kinetika Obmena
s Uchastiem Vodorodnykh Ionov]. [1961] [9]p. 7 refs.
Order from OTS or SLA \$1.10 62-10229

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1959,
v. 33 [no. 4] p. 936-942.
Another trans. is available from LC or SLA ml\$1.80,
ph\$1.80 as 61-13398, DSIR NLL M. 2037 [1960] 8p.

DESCRIPTORS: *Ion exchange resins, Resins,
*Hydrogen, Sodium, Rubidium, *Ions, Exchange
reactions, Reaction kinetics, Adsorption, Diffusion.

For abstract see Technical Translations 5: 297, 1961.
(Chemistry--Physical, TT, v. 7, no. 10)

I. Fedosseeva, O. P.
II. Chernyaeva, E. P.
III. Tunitskil, N. N.
IV. Title: Kinetics.

Office of Technical Services

The Catalytic Properties of the System Pt + Au,
by A. A. Alchudzhan, M. A. Indzhikyan,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 5,
1959, pp 983-987.

ATS RJ-2159

Sci - Chem

May 60

115,440

Aykazyan, E. A.
PASSIVATION OF THE PLATINUM ELECTRODE (O
Passivatsii Platinovogo Elektroda). Apr 61 [13]p.
16 refs. RTS 1797.
Order from OTS or SLA \$1.60 61-19671

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1959,
v. 33, no. 3, p. 1016-1022.

DESCRIPTORS: Electrodes, *Platinum electrodes,
Electrochemistry, *Passivity, *Polarization.

(Chemistry--Physical, TT, v. 6, no. 2)

61-19671

I. Aykazyan, E. A.
II. RTS-1797
III. Department of Scientific
and Industrial Research
(G. Brit.)

107595

Office of Technical Services

Model Studies of Regeneration of Silica-Alumina Cracking Catalysts. II. Burning-off of Surface Coke and General Kinetic Relationships of the Process, by D. P. Cobyehin, Ts. M. Klivanova, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, 1959, pp 1023-1029.

Sci
Vol IV, No 2
Mar 62

ATS-06L37R

ATS-RJ-2380

188, 885

Acidity Function of the Diethyl Ether- BF_3 System,
by G. B. Manelis.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 5,
1959, pp 1030-1034.

ALL RFB 2232

Sci -
Jul 63

238,182

Self-Diffusion of Dibasic Phosphate Ion in the
System Water-Electrolyte-Nonelectrolyte, by
P. Ya. Siver, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 5, 1959,
pp 1065-1070.

SLA 60-17727

Sci

OTS, Vol IV, No 3

Sep 60

129,408

The Photocatalytic Properties of Zinc Oxide in
the Reduction of Methylene Blue. 4. Poisoning
of the Photocatalysts by Nitro Compounds, by I. N.
Barshchevskiy.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 5,
1959, pp 1071-1079.

DSIR LLU RTS 1537

Sci - Chem

Sep 60

125,547

Investigation of the Rate of Burning of Atomized
Fuel in a Turbulent Flow. ID 2132569

RUSSIAN, for, Zhur P. I. Khim, Vol. XXIII, 1959,
pp 1080-1086.

Sci - Phys

Oct 59

3
ACSI, H-483
ATS-05-37R
ATS/RJ-2473

110,349

Vasil'yev, S. S.

KINETIC ANALYSIS OF CHAIN REACTIONS. V.
REARRANGEMENT OF THE FORM OF THE SOLU-
TIONS OF THE BASIC EQUATIONS OF THE KINET-
ICS OF CHAIN REACTIONS FOR THE CASE OF
TWO ACTIVE SPECIES (Kineticheskiy Analiz
Tsepnykh Reaktsii. V. Preobrazovaniye Formy
Reshenii Osnovnykh Uravnenii Kinetiki Tsepnykh
Reaktsii dlya Sluchaya Dvukh Aktivnykh Chastits).
Jan 61 [16]p. 9 refs. RTS 1739.
Order from LC or SLA ml\$2.40, ph\$3.30 61-15732

Trans. of Zhur[nnl] Fiz[icheskoy] Khim[iti] (USSR)
1959, v. 33, no. 5, p. 1100-1110.

Transformations of the form of the solutions of the
basic differential kinetic equations of chain reactions
for the case of two active species led to expressions
that directly show how the kinetic development of
chain reactions is affected by the magnitudes of the
generalized rate constants of the initial kinetic
(Chemistry--Physical, TT, v. 5, no. 12) (over)

61-15732

- I. Chemical reactions--
Mathematical analysis
2. Title: Chain reactions
- I. Vasil'yev, S. S.
- II. RTS-1739
- III. Department of Scientific and
Industrial Research
(Gt. Brit.)
- IV. Title: Rearrangement ...

106642

Office of Technical Services

Heat of Adsorption in the Electronic Chemical
Sorption Theory, by Sh. M. Kogan, V. B.
Sandomirskiy, 8 pp.

RUSSIAN, Doc. Chem. Phys. Chem., Vol. XXXIII, 1959,
pp 1129-1133.

AEC Tr-4299

Sci - Phys, Chem
21 Feb 61

140,948

Fedosseeva, O. P. and Tunitakli, N. N.
STUDY OF THE KINETICS OF ION EXCHANGE
SORPTION. III. COMPLETE EXCHANGE BETWEEN
MONOVALENT AND DIVALENT ION IN RESINS.
[1961] [9]p. 4 refs.

Order from OTS or SLA \$1.10

62-10307

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1959,
v. 33, [no. 5] p. 1140-1146.

DESCRIPTORS: *Ion exchange resins, Resins, Hydro-
gen, Sodium, Calcium, Strontium, Ions, Exchange
reactions, Reaction kinetics, Diffusion, Adsorption.

The effect was studied of the cationic form of the resin
on the diffusion coefficients of ionic microcomponents.
It is shown that monovalent as well as divalent ions
diffuse faster in a resin containing monovalent ions
than in a resin containing divalent ions. Swelling of
(Chemistry-Physical, TT, v. 7, no. 10) (over)

62-10307

- I. Fedosseeva, O. P.
- II. Tunitakli, N. N.
- III. Title: Complete ...

Office of Technical Services

19

(DC-3692).

Boris Vasil'yevich Yerofeyev (On his 50th
Birthday), by S. V. Markevich, 4 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 5,
1959, pp 1155, 1156.

JPRS 3368

USSR
Biog
Jun 60

117,571

Study of the Oxidation of Cyclohexane by
the Method of Inhibition During the Reaction,
by E. T. Denisov, 13pp.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii,
Vol 33, 1959, No 6, pp 1198-1208.

CFSTI TT-64-18412

323,208

Sci - Chemistry
Apr 67

3-407/60

(SI-5593)-

The Physical Chemistry of Concentrated Ozone.
VI. The Explosive Sensitivity of Ozone-Oxygen
Mixtures With Respect to Heat Impulses, by
V. V. Yastrebov, Ye. H. Pitskhelauri, N. I.
Kobozov, 9 pp.

RUSSIAN, per Zhur Fiz Khim, Vol XXXIII, No 6,
1959, pp 1209-1213.

JPRS 2621

116/112

Sci - Chem/Physical
May 60

Presentation of the Equation of State of Real
Gas in Explicit Form in Terms of the Independent
Variables T and v , by V. A. Zagoruchenko,
P. M. Kessel'man, 8 pp.
RUSSIAN, per, Zhurnal Fizicheskoy Khimiy, Vol 33,
No 6, 1959, pp 1221-1229.
NTIS TT 69-55051

Sci/Chem
Dec 70

Investigation of the Surface State of Nickel
and Iron Cathodes From the Drop in Potential
After Disconnecting the Current, by
V. E. Past, Z. A. Iofa.
RUSSIAN, per, Zhurnal Fizicheskoy Khimii,
Vol 33, No 6, 1959, pp 1230-1237.
NASA TT F-11,770

Sci
Dec 68

371,123

A Study of the Wetting of Solid Surfaces of Refractory Oxides by Liquid Metals, by V. N. Yerenenko, Yu. V. Maydich.

RUSSIAN, per, Zhurnal Fiz Khimii, Vol 33, No 6, 1959, pp 1238-1245.

CIA X-6779

Oct 68

369,408

Investigation of the Influence of the Structure of Unsaturated Compounds on Their Reactivity in Copolymerization Processes. Part 2. The Effect of Different Substituents Attached to the Nitrogen on the Reactivity of Methacrylamide Derivatives With Respect to a Common Type of Radical, by G. A. Petrova, G. A. Shtraykhman, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 6, 1959, pp 1245-1252.

195,969

Sci
Vol 4, No 10, May 62

ATB-2344R
ATB/RJ-2450

Zosimovich, O. P. and Bogatova, N. F.
ELECTRO-DEPOSITION OF ZINC IN THE PRE-
SENCE OF SMALL QUANTITIES OF ANTIMONY AND
COBALT (Elektroliticheskoye Vydeleniye Tsinka v
Prisutstviy Mal'kikh Kolichestv Sur'my i Kobal'ta).

Nov 60 [8]p. 10 refs. RTS 1692.

Order from LC or SLA m51.80, h51.80 61-15219

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1959,
v. 33, no. 6, p. 1324-1327.

It is established that in the presence of small quanti-
ties of antimony (0.05 mg/l) and cobalt (20 mg/l)
during the electrolytic deposition of zinc an increase
in polarisation is observed. When cobalt is present in
solutions containing 0.2 mg/l of antimony, the process
is determined by the presence of antimony. Antimony,
introduced into the electrolyte either as potassium
antimonyl tartrate (tartar emetic) or as antimony
sulphate, has the same influence on the course of the
polarisation curves. It is suggested that small
(Chemistry-Physical, TT, v. 5, no. 7) (over)

61-15219

- I. Zinc--Electrodeposition
- I. Zosimovich, O. P.
- II. Bogatova, N. F.
- III. RTS-1692
- IV. Department of Scientific
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(Gt. Brit.)

148,730

Office of Technical Services

Phase Equilibria in the System Melamine-Ammonia,
by I. P. Krichevskiy, G. D. Efremova,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 6,
1959, pp 1328-1335.

ATS RJ-2040

Sci - Chem
Dec 59

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A Method for Calculating Vapor-Liquid Equilibria
of Tricomponent Systems, by V. B. Kogan, V. M.
Safronov, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 6,
1959, pp 1353-1359.

SLA 60-17729

Sci

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OTS, Vol IV, No 3

Sep 60

Shilov, A. Ye. and Sabirova, R. D.
MECHANISM OF THE PRIMARY ACT OF DECOM-
POSITION OF CHLORINE DERIVATIVES OF METH-
ANE. I. DECOMPOSITION OF CARBON TETRACHLO-
RIDE AND METHYL CHLORIDE (Mekhanizm Pervich-
nogo Akta Termicheskogo Raspada Khlorproizvodnykh
Metana). Nov 60 [17]p. 19 refs. RTS 1527.
Order from LC or SLA m\$2.40, ph\$3.30 61-13488

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1959
[v. 33] no. 6, p. 1365-1373.

The kinetics of the thermal decomposition of carbon
tetrachloride and methyl chloride in jets was investi-
gated. The primary decomposition in both cases takes
place with the disruption of a chlorine atom. A mech-
anism for the secondary reaction is suggested, which
agrees with the products of reaction and the kinetic
data. (Author)

(Chemistry--Physical, TT, v. 3, no. 4)

61-13488

- I. Chlorides--Decomposition
- I. Shilov, A. Ye.
- II. Sabirova, R. D.
- III. Title: Decomposition...
- IV. RTS-1527
- V. Department of Scientific
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THE SOLUBILITY OF GASEOUS ISOBUTYLENE IN
WATER. [1962] 6p.

Order from ATS \$8.95

ATS-97P64R

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1959,
v. 33, no. 6, p. 1409-1413.

DESCRIPTORS: *Butenes, Gases, Solubility, Water

At-L 3732 B-7 (1110)

Walt R. Cooney

C. and C.

NAC 0-778

(Chemistry--Physical, TT, v. 9, no. 2)

63-12262

I. Kazanskii, K. S.

II. Entelis, S. G.

III. Chirkov, N. M.

IV. ATS-97P64R

V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS RJ-3942

Office of Technical Services

Absorption Properties of Cellulose in the Process of
Its Thermal Decomposition, by T. V. Gatovskaya.

RUSSIAN, per, Zhur Fiz Khim., Vol 33, No 6, 1959,
pp 1418-1421.

*NTIS TT 71-51001

July 71

DR

TT-62-26386

Marinin, V.A.
VARIATION THERMIQUE DU COEFFICIENT DE DIFFUSION DE CERTAINES SUBSTANCES DANS LE TETRACHLORÉTHANE ET LE TETRABROMÉTHANE (Temperature Relation of the Diffusion Coefficient of Substances in Tetrachloro- and Tetrabromoethane). 5p. 5 refs. CNRS-VIII bis 690
Order from OTS, ETC or CNRS \$0.80 TT-62-26386

Trans. in French of Zhurnal Fizicheskoi Khimii (USSR) 1959, v.33, no.6, p.1430-1433.

DESCRIPTORS: Bromine compounds, Chlorine compounds, Hydrogen compounds, Carbon compounds, *Diffusion, Heat, *Ethanes.

(Chemistry--Physical, TT, v. 11, no. 7)

- I. Marinin, V.A.
- II. CNRS-VIII bis 690
- III. Centre National de la Recherche Scientifique, Paris

Office of Technical Services
European Translations Centre

The Thermodynamics of the Superstate, by V. K. Semanchenko, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, 1959, pp 1440-1445.

AEC Tr-4271

Sci - Phys
9 Mar 61

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Applying Thermodynamics of Irreversible Processes
to the Phase Theory. The Case of the Two Component
Two-Phase System at Constant Temperature and
Pressure, by Kiril A. Popov.

RUSSIAN, per, Zh. Fiz Khim, Vol 32, 1958,
pp 1638-47.
WAPD-tr-57

Sci - Chem
Oct 67

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Ion Hydration and Its Mechanism. The Structure
and Dimensions of Hydrated Ions, by A. F.
Kapustinakiy, 15 pp.

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No 7, pp 1648-1657.

SLA 60-17725

Sci

3 Mar 62

186, 171

Andreeva, V. V. and Shishakov, N. A.
DE L'ÉPAISSEUR DES PELLICULES D'OXYDES SUR
CERTAINES MÉTAUX SELON LES DONNÉES DES
ÉTUDES ELECTRONOGRAPHIQUES ET OPTIQUES
[On the Thickness of Oxide Films on Some Metals from
the Data of Electron Diffraction and Optical Investiga-
tions] tr. by de Trezvinaky. 22 Mar 60 [8]p. 5 refs.
CEA Trans. no. R 855 (text in French).
Order from OTS or SLA \$1.10

61-23816

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1958, v. 32, no. 7, p. 1671-1672.
A translation in English is available from LC or SLA
ml\$1.80, ph\$1.80 as AEC-tr-3955, Jan 60, 5p.

DESCRIPTORS: *Metals, *Oxidation, *Thin films,
*Oxides, Electron diffraction analysis, Optical analysis
Thickness.

For abstract see Technical Translations 3: 776, 1960.
(Chemistry--Physical, TT. v. 6, no. 6)

61-23816

- I. Andreeva, V. V.
- II. Shishakov, N. A.
- III. CEA-tr-R855
- IV. Commissariat à l'Énergie
Atomique (France)

176696

Office of Technical Services

Pentagon Arsenal

R--13363-D

Req. 154-71

28 June 1971

Zhur. Fiz. Khim. Vol. 32, pp. 1690-1691. (1958).
(Russian Journal of Physical Chemistry)

Medvedev, V. A.

Language: Russian

Please translate & type 1 copy only.

Method of Calculating the Thermodynamic Properties
of Some Compounds Without Knowledge of Their
Vibration Spectra, by Yu. P. Maslov, P. G.
Maslov. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958,
pp 1715-1725.

DSIR LLU M.1285

(loan)

111,137

Sci - Phys; Chem

Mar 60

Andreev, K.K., Glazkova, A.P. and others,
DECOMPOSITION THERMIQUE DES NITRO-ETHERS.
I. ETUDE DE LA CINETIQUE DE LA DECOMPOSITION
DE LA NITROGLYCERINE ET DE NITROGLYCOL. A
L'AIDE DE LA METHODE MANOMETRIQUE (The
Thermal Decomposition of Nitroesters. I. The Mano-
metric Method of Studying Nitroglycerin and Nitro-
glycol Decomposition Kinetics). 20p. 12refs.
CNRS-VIII bis 495.
Order from OIS, EIC or CNRS \$1.60 TT-62-26532

Translation of Zhurnal Fizicheskoi Khimii
(USSR) 1978, v. 52, no. 2, p. 273-277.

DESCRIPTORS: **Nitroesters; Decomposition;
*Kinetic theory; Gases; Vapors; Gases; Manome-
ters; Reaction kinetics

(Chemical Abstracts, 77, v. 11, no. 8)

TT-62-26532

I. Andreev, K.K.
II. Glazkova, A.P.
III. CNRS VIII bis 495
IV. Centre National de la Recherche
Scientifique, Paris

Office of Technical Services
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The Approximation Computation of the Temperature
Function of Heat Capacity, by M. Kh. Karapet'-
yants, 14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 8,
1958, pp 1763-1773.

OTS 60-17719

Sci

30 Mar 62

188, 910

Kinetics of Catalytic Cracking of n-alkanes,
by G. K. Pannichenkov, A. S. Nazanskaya, 6 pp.

RUSSIAN, par, Zhur Via Khim (USSR), Vol LXXIX,
No 8, 1958, pp 1779-1783.

Assoc Tech Serv

57126R

ATG/RJ-1535

Sci - Chem

May 59

Q12, V 3, No 6

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The Mechanism of the Cathode Process in the
Electrolysis of a Fused NaCl-CaCl_2 Mixture on
an Iron Cathode, by L. Suskii, ~~22~~² 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958,
pp 1785-1795.

AEC Tr 3658

Sci - Phys

*Dept of Chemistry
T-17, E-17, No 303*

Jun 59

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Catalytic Properties of Cerium Dioxide in the
Dehydrogenation and Dehydration of Alcohols
and in the Dehydrogenation of Cyclohexane, by
A. A. Tolstopyatova, A. A. Balandin.

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1958, pp 1831-1841.

ATS RJ-1903

Sci - Chem
Dec 59

211 60-10582

104,080

Antonovskaya, E.I. and Sukhotin, A.M.
SUR LES PARTICULARITES DE L'ACTIVATION
ANODIQUE DU CHROME ET DES ACHERS AU CHROME.
II (Ob Osobennostyakh Anodnogo Aktivirovaniya Khroma
i Khromistykh Stalей). II (Peculiarities of the Anodic
Activation of Chromium and Chromium Steels. II) 14p.
(foreign text included) 5 refs. CNRS-VIII bis 584.
Order from OIS, E.O. or CNRS 80,80 TT-62-28263

Trans. in French of Zhurnal Fizicheskoi Khimii (USSR)
1958, v. 32, no. 8, p. 1842-1846.
Trans. in English available from ATS 88,00 as
ATS-63MHR.

DESCRIPTORS: Chromium; Chromium alloys;
Iron alloys; Steel; Anodes; Anodic treatment; pH.

(Metallurgy-ferrous Metals, FI, v. II, no. 8)

TT-62-28263

I. Antonovskaya, E.I.
II. Sukhotin, A.M.
III. CNRS-VIII bis 584
IV. Centre National de la Recherche Scientifique, Paris

Office of Technical Services
European Translation Centre

S-322/60

(NY-3919)

Studies of Thermodynamic Properties of Substances
With the Aid of the Method of Explosion in a
Spherical Bomb, by V. A. Medvedev, 12 pp.

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pp 1851-1858.

JPRS 2842

Sci - Chem

Jul 60

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Enthalpy of Corundum in the Temperature Range From
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pp 1859-1862.

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Jun 59

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Study of Initiation and Propagation of Spherical
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1958, pp 1869-1872. 9073491

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Sci - Physics
Feb 59

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Leon'tev, E. A. and Luk'yanovich, V. M.
TECHNIQUE DE PREPARATION DES CORPS POREUX
ET PULVERULENTS POUR L'ETUDE AU MICRO-
SCOPE ELECTRONIQUE PAR LA METHODE DES
REPLIQUES [Tekhnika Preparirovaniya pri Provedenii
Elektronno-Mikroskopicheskikh Issledovaniy Poristykh
i Poroshkobraznykh tel Metodom Replik] (Technique
for Preparation of Porous Bodies and Powders for
Electron Microscopic Study by the Replica Method) tr.
by Bouchicot. 21 Jan 60 [14]p. 8 refs. CEA Trans.
no. R 812 (text in French).

Order from OTS or SLA \$1.60

61-23784

Trans. in French of Zh[urnal] Fiz[icheskoi] Khim[i]
(USSR)1958, v. 32, no. 8, p. 1922-1925

DESCRIPTORS: *Porous materials, *Powders, Electron

(Physics--Optics, TT, v. 6, no. 7)

61-23784

- I. Title; Replicas
- I. Leon'tev, E. A.
- II. Luk'yanovich, V. M.
- III. CEA-tr-R812
- IV. Commissariat a
l'Energie Atomique
(France)

Office of Technical Services

Fedorov, N.A.
PROPRIÉTÉS DES ÉLECTRODES DE VERRE AU
LITHIUM (Elektrodye Svoitsva Litieyogo Stekla) (The
Electrode Properties of Lithium Glass), 19p. (foreign
text included) 2 refs., CNRS-VIII bis 487.
Order from OLS, EIC or CNRS \$0.80 TT-62-28257

Trans. in French of Zhurnal Fizicheskoi Khimii (USSR)
1958, v. 32, no. 9, p. 1951-1957.

DESCRIPTORS: *Glass electrodes, *Lithium,
Chemical properties, High temperature research,
Measurement.

(Chemistry--Physical, TT, v. 11, no. 8)

TT-62-28257

I. Fedorov, N.A.
II. CNRS-VIII bis 487
III. Centre National de la Recherche Scientifique, Paris

Office of Technical Services
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Investigation of Hydrogen Over-Voltage on
Germanium, by Ye. A. Yefimov, I. G. Yerusolirchik.
9 pp.

RUSSIAN, per, Zhur Fiz Khim USSR, Vol XXXII,
No 9, 1958, pp 1967-1970.

SLA 59-15004

Sci
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Vol 2, No 4

103085

63-12474

Bogoyavlenskii, P. S.
THE EFFECT OF LARGE MONOVALENT IONS ON
THE STRUCTURE OF WATER AND ITS INFLUENCE
ON THE SOLUBILITY OF SALTS. [1962] 8p.
Order from ATS \$13.50 ATS-00P65R

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1958,
v. 32, no. 9, p. 2035-2041.

DESCRIPTORS: *Water, Molecular structure, Ions,
*Salts, Solubility.

I. Bogoyavlenskii, P. S.
II. ATS-00P65R
III. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS RJ-3942

(Chemistry--Physical, TT, v. 9, no. 5)

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On the Passivity of Iron in Hot Concentrated
Alkaline Solutions, by A. M. Sukhotin, K. M.
Kortashova; UNCLASSIFIED

(7 pp.)

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 9, 1958,
pp 2060-2072. 9676977

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Sci - Physics
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CIA/FDD X-3756

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Phase and Volume Correlations in Liquid-Gas ~~SYSTEMS~~
Systems Under High Pressures. VI.. System
Cyclohexane-Hydrogen, by I. P. Krichevskiy,
F. T. Sorina, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII,
No 9, 1958, pp 2080-2086.

SLA 60-14057

Sci
Vol IV, No 5
Mar62

188, 446

Verigin, N. N.
DIFFUSION À LA SURFACE D'UN CORPS SOLIDE
PLONGÉ DANS UN LIQUIDE [Diffuziya u Poverkhnosti
Tverdogo Tela, Nakhodyashchegosya v Zhidkosti]
[Diffusion at the Surface of a Solid Body Immersed in a
Liquid] tr. by M. Grekow. 22 June 60 [22]p. 10 refs.
CEA Trans. no. R 984 (text in French).
Order from OTS or SLA \$2.60 61-15803

Trans. in French of Zhurnal Fizicheskoy Khimii
(USSR) 1958, v. 32, no. 9, p. 2097-2106.

DESCRIPTORS: *Diffusion, Solids, *Corrosion,
Concrete, Rock, Liquids.

(Chemistry--Physical, TT, v. 6, no. 2)

61-15803

I. Verigin, N. N.
II. CEA-tr-R984
III. Commissariat à l'Énergie
Atomique (France)

10970

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Investigation of the Absorption of Ions on Platinised KM
Platinum by Measuring the Adsorption Potentials, by
A. D. Obruchava, 13 pp.

RUSSIAN, per, Zhurn Fiz-Khim, Vol XXXII, No 9, 1958,
pp 2155-2164.

MDF-0-110

Sci
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Effect of Ionizing Radiation on Aqueous
Solutions of Potassium Nitrate, by
A. M. Kabakchi, V. A. Gramolin, 11 pp.
RUSSIAN, per, Zhurnal fizicheskoiy khimiy,
Vol 32, 1958, No. 9, pp 2149-2154.
AEC-RFP-TRANS P911263468-V

Sci/Chem
Oct 68

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Dissolution Anodique des Metaux Dans les Sels Fondus,
II. Beryllium. (Anodic Dissolution of Metals in
Fused Salts. II. Beryllium), by M. V. Smirnov,
N. Ya. Tuchukreyev, 21 pp.

RUSSIAN to FRENCH, per, Zhur Fiz Khim, Vol XXXII,
1958, pp 2165-2173.

Reverse Trans
CEA tr R-653

Nov 59

Cathodic Processes in the Deposition of
Beryllium From Fused Electrolytes, by M. V.
Smirnov, L. V. Ivanovskiy, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958,
pp 2174-2182.

ABC Tr-4416

Sci - Phys
May 61

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Phenomenes Accompagnant le Depot Electrolytique du
Beryllium a Partir des Sels Fondus. (Phenomena
Accompanying the Electrolytic Deposition of
Beryllium From Fused Salts), by M. V. Smirnov,
L. E. Ivanovskiy, 18 pp.

RUSSIAN to FRENCH, per, Zhur Fiz Khim, Vol XXXII,
1958, pp 2174-2182.

Reverse Trans
CEA tr R-661

Nov 59

Determination of the Specific Surface Areas of
Porous Bodies and of Powders by the Method of
Gaseous Flow Under Low Pressure, by S. G. Entelis,

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1958, pp 2187-2191.

ATS RJ-2167

Sci - Chem

May 60

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On the Nature of Cold Flame Phenomena, by H. S.
Saikolopian, et al.

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RUSSIAN, per, Zhur Via Khim, Vol XXXII, No 9,
1958, pp 2224-2226.

Navy 1989/T-59

Sci - Physics
Jan 59

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Polymerization of Chlorinated Styrene Derivatives and Their Copolymerization with Vinyl Chloride, by G. V. Tkachenko, L. V. Stupen', et al., 10 pp.

RUSSIAN, per, Zhur Fiz Khim, 1958, Vol XXXII, No 10, pp 2250-2255.

SLA 59-10445

Sci - Chem
OTS I, 12
Jul 59

92, 262

Balashova, N. A.
ADSORPTION DES IONS BROME ET IODE SUR LE
PLATINE [Adsorbsiya Ionov Broma i Yoda na Platina]
[Adsorption of Bromine and Iodine Atoms on Platinum] tr.
by Mine. Simon. 5 July 60 [21]p. 28 refs. CEA Trans.
no. R 964 (text in French).
Order from OTS or SLA \$2.60

61-23780

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1958, v. 32, no. 10, p. 2266-2273.
A translation in English is available from MDP \$6.00 as
MDP B-151 [1959] 12p.

DESCRIPTORS: *Platinum electrodes, *Adsorption,
Bromine, Iodine, Ions.

For abstract see Technical Translations 3: 566, 1960.

(Chemistry--Physical, TT, v. 6, no. 6)

61-23780

- I. Balashova, N. A.
- II. CEA-tr-R964
- III. Commissariat à l'Énergie Atomique (France)

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The Cause of the Anticorrosion Effect of Sodium
Nitrite on Iron, by N. A. Shishakov, 6 pp.
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1958, pp 2282-2286. 9676948

Navy 2366/MRL 758

Sci - Physics
Nov 59

CIA/FDD X-3757

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